4.

## We Claim:

- A method of providing digital data from a source system to an embedded system in a secure manner, comprising the steps of: combining the data with header information including a target identifier corresponding to the embedded system; providing the combined digital data with header information to the embedded system; and verifying the target identifier before the embedded system is enabled to load the digital data.
- The method as defined in claim 1 wherein the target identifier is a text name corresponding to an end user of an Internet based service.
- The method as defined in claim 1 wherein said target identifier includes a revision level respecting said digital data.

A method of providing digital data from a source system to an embedded

- system in a secure manner, comprising the steps of:
  combining the data with header information including a target identifier
  corresponding to the embedded system;
  signing the combined digital data with header information with a digital
  signature corresponding to the source system, the digital signature being
  added to the header information
  providing the combined digital data with header information to the
  embedded system; and
  verifying the digital signature and the target identifier before the
  embedded system is enabled to load the digital data.
- The method as defined in claim 4, wherein the step of signing the combined digital data with header information uses a private cryptographic key associated with the source system to generate the digital signature.

- The method as defined in claim 5 wherein the step of verifying the digital signature uses a public key corresponding to the private cryptographic key.
- 7. An embedded system that uses a target state header to validate uploaded files the system comprising: means to combine the files to be uploaded with the target state header; means to provide the files with the target state header to the embedded system; and verifying means to verify the target state header before the files are
- The embedded system as defined in claim 7 having means to provide a digital signature for use in verifying the files before uploading to the embedded system.
- The embedded system as defined in claim 8 having public keying infrastructure for distributing public keying information to said embedded system.

uploaded to the embedded system.

- The embedded system as defined in claim 9 having software for performing signature generation and verification.
- The embedded system as defined in claim 7 for use in conducting transactions on the Internet.
- The embedded system as defined in claim 11 wherein said transactions include the purchase and download of software.
- The embedded system as defined in claim 11 wherein said transactions include online banking.
- 14. The embedded system as defined in claim 11 wherein said transactions include the installation of software revisions in network nodes.
- The embedded system as defined in claim 11 wherein said network nodes include wireless telephones.